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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,113	12/05/2003	Jeffery R. Parker	GLOLP0114USA	3167
7590	02/23/2005		EXAMINER NEGRON, ISMAEL	
Donald L. Otto Renner, Otto, Boisselle & Sklar, LLP 19th Floor 1621 Euclid Avenue Cleveland, OH 44115-2191			ART UNIT	PAPER NUMBER
			2875	
DATE MAILED: 02/23/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/729,113

Applicant(s)

PARKER ET AL.

Examiner

Ismael Negron

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4/8/2004</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Title*

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: **Method of Selecting a Light Redirecting Film.**

### *Abstract*

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

2. The abstract of the disclosure is objected to because it fails to concisely describe the subject matter of the invention, the abstract is silent as to the steps included in the claimed method. Correction is required. See MPEP § 608.01(b).

### ***Drawings***

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “D” has been used to designate both “*display*” (paragraph 0039, line 8) and “*liquid crystal display*” (paragraph 0041, line 1). In addition, note the following:

- reference character “26”, used to designate “*light source*” (paragraph 0051, line 12), “*cold cathode fluorescent lamp*” (paragraph 0057, lines 4 and 5) and “*light emitting diodes*” (paragraph 0058, line 5); and
- reference character “54”, used to designate “*reflective or refractive surface*” (paragraph 0071, lines 5 and 6) and “*reflective/refractive surface*” (paragraph 0071, lines 9 and 10).

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "2" has been used to designate different parts in different embodiments. See figures 5 and 6-24. In addition, note the following:

- reference character "5" as used in figures 5-24;
- reference character "10" as used in figures 5a, 5b, 7, 13 and 15;
- reference character "12" as used in figures 5a, 5b and 13;
- reference character "18" as used in figures 5f and 5g;
- reference character "19" as used in figures 5f and 5g;
- reference character "20" as used in figures 5h-5i;
- reference character "22" as used in figures 5j-5m;
- reference character "23" as used in figures 5j-5m;
- reference character "26" as used in figures 1 and 18;
- reference character "32" as used in figures 13, 15 and 18;
- reference character "35" as used in figures 21 and 23;
- reference character "50" as used in figures 27-30;
- reference character "52" as used in figures 27-51;
- reference character "77" as used in figures 38 and 47 ;
- reference character "79" as used in figures 37-40;
- reference character "91" as used in figures 48-51;
- reference character "92" as used in figures 25, 50 and 51;
- reference character "94" as used in figures 50 and 51; and
- reference character "95" as used in figures 25 and 31-39.

5. The applicant is advised that the reference characters must be properly applied, with no single reference character being used for two different parts or for a given part and a modification of such part. See MPEP §608.01(g).

Applicant is further advised that this action only exemplifies the objections to the drawings, applicant's cooperation is requested in correcting all the occurrences of the cited, or any other errors of which applicant may become aware in the specification.

6. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2, 10, 12-15, 18-21, 29, 30, 32-34 and 37 are rejected under 35

U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over ASHALL (U.S. Pat. 5,390,436).

ASHALL discloses an illumination device having:

- **a light redirecting film (as recited in claims 1, 10, 20 and 30),**  
Figure 1, reference number 13;
- **the film having a plurality of optical elements (as recited in**  
**claims 1, 10, 20 and 30),** column 2, lines 3-6;
- **the optical elements being disposed in a pattern (as recited in**  
**claims 1, 10, 20 and 30),** as seen in Figure 1;
- **the pattern varying across the substrate (as recited in claims**  
**20 and 30),** column 2, lines 20-22;
- **the pattern varies along the length of the substrate (as recited**  
**in claims 2 and 21),** column 2, lines 20-22;
- **the optical elements being small in relation to the size of the**  
**film (as recited in claims 10 and 30),** as evidenced by Figure 1;
- **the pattern varying at different locations on the film (as recited**  
**in claims 12 and 32),** column 2, lines 20-22;
- **at least some of the elements overlap, intersect or interlock**  
**each other (as recited in Claim 13),** as evidenced in column 2,  
lines 34-39;

- **at least some of the elements have different shapes (as recited in claims 14 and 33), column 2, lines 27-29;**
- **at least some of the elements have a different beam profile at different locations on the film (as recited in claims 15 and 34), inherent as produced by the varying distribution of the elements;**
- **at least some of the elements vary in at least one of the slope angle, density, position, orientation, height or depth, shape, and size (as recited in claims 18 and 37), column 2, lines 23-26;**
- **at least some of the elements being arranged in groupings across the film (as recited in Claim 19), column 2, lines 23-26;**
- **at least some of the optical elements in at least some of the groupings having a different size or shape (as recited in Claim 19), column 2, lines 23-26;**
- **the size or shape of the elements of each group collectively producing an average size or shape characteristic for each group (as recited in Claim 19), column 2, lines 23-26;**
- **the average size or shape of the groupings varying across the film (as recited in Claim 19), column 2, lines 23-26;**
- **a back light member (as recited in Claim 29), Figure 1, reference number 10; and**
- **the film being applied to the back light member (as implied in Claim 29), column 3, lines 15-17.**



ASHALL fails to disclose a method for selecting the light redirecting film.

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made would have recognized the claimed method of selecting a light redirecting film as inherently disclosed by the structural limitations of the illumination device of ASHALL. However, even if the particular method presented by the claims is not considered as inherently disclosed by the patented structure of ASHALL, such method would have been considered an obvious matter of design choice as required by the specific requirements of a particular application, such method having no impact on the final structure or characteristics of the claims optical film. Support for such finding of non-criticality of the method, is found in the applicant's own description, such description being silent as to the advantages of one method over another. In fact, applicant's disclosure is directed to the structure, and makes no mention at all of a particular method of selecting the light redirecting film.

8. Claims 1, 2, 10, 12-15, 18-21, 29, 30, 32-34 and 37 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over PARKER et al. (U.S. Pat. 5,618,096).

PARKER et al. discloses an illumination device having:

- a light redirecting film (as recited in claims 10 and 30), Figure 4a, reference number 20;
- the film having a plurality of optical elements (as recited in claims 10 and 30), Figure 4a, reference number 21;

- the optical elements being disposed in a pattern (as recited in claims 10 and 30), column 4, lines 28-34;
- the optical elements being small in relation to the size of the film (as recited in claims 10 and 30), as evidenced by Figure 4a;
- at least some of the optical elements are randomly distributed on the film (as recited by claims 16 and 35), column 5, lines 45-58.

PARKER et al. fails to disclose a method for selecting the light redirecting film. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made would have recognized the claimed method of selecting a light redirecting film as inherently disclosed by the structural limitations of the illumination device of PARKER et al.. However, even if the particular method presented by the claims is not considered as inherently disclosed by the patented structure of PARKER et al., such method would have been considered an obvious matter of design choice as required by the specific requirements of a particular application, such method having no impact on the final structure or characteristics of the claims optical film. Support for such finding of non-criticality of the method, is found in the applicant's own description, such description being silent as to the advantages of one method over another. In fact, applicant's disclosure is directed to the structure, and makes no mention at all of a particular method of selecting the light redirecting film.

9. Claims 3, 4, 7, 11, 17, 22, 23, 26, 31 and 36 rejected under 35 U.S.C. 103(a) as being unpatentable over ASHALL (U.S. Pat. 5,390,436) in view of MIZOBE (U.S. Pat. 5,641,219).

ASHALL discloses, or suggests, all the limitations of the claims as detailed in Section 7 of the instant Office Action, except:

- the pattern varying along the width of the film (as recited in claims 3 and 22);
- the pattern varying along both the length and width of the film (as recited in claims 4 and 22);
- the pattern being a repeating pattern on the film (as recited in claims 7, 11, 26 and 31); and
- at least some of the optical elements are oriented at different angles on the film (as recited in claims 17 and 36).

MIZOBE discloses an illumination device having:

- **a substrate**, Figure 4, reference number 1;
- **a light source**, Figure 4, reference number 6;
- **optical elements**, Figure 4, reference number 3;
- **the optical elements being located on a surface of the substrate**, column 3, lines 46-51;
- **the elements forming a pattern**, as seen in figures 4-6;
- **the pattern varying along the length of the film**, column 4, lines 19-23;
- **the pattern varying along the width of the film (as recited in claims 3 and 22)**, column 4, lines 24-30;

- **the pattern varying along both the length and width of the film (as recited in claims 4 and 23), as seen in figures 4-6; and**
- **at least some of the optical elements are oriented at different angles on the film (as recited in claims 17 and 36), as seen in figures 5 and 6.**

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to vary the pattern along the width of the film (as recited in claims 3 and 22), or both the length and width of the film (as recited in claims 4 and 23) to compensate for the distribution of light across the surface of the light source and further increase the uniformity of the light produced by the film, as per the teachings of MIZOBE (column 4, lines 24-40).

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to orient at least some of the optical elements at different angles on the film (as recited in claims 17 and 36) to compensate for the angular displacement as well as the longitudinal displacement of the optical elements with respect to the location of the light source, even further increase the uniformity of the light produced by the film, as per the teachings of MIZOBE (column 4, lines 59-65).

10. Claims 5, 6, 8, 9, 24, 25, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over ASHALL (U.S. Pat. 5,390,436).

ASHALL discloses, or suggests, all the limitations of the claims as detailed in Section 7 of the instant Office Action, except:

- the film being formed in a roll (as recited in claims 5, 8, 24 and 27);
- the selected area being removed from the film roll (as recited in claims 5, 8, 24 and 27); and
- the selected area being die-cut from the length of the film (as recited in claims 6, 9, 25 and 28).

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to form the film in a roll (as recited in claims 5, 8, 24 and 27) with the selected area being removed such film roll (as recited in claims 5, 8, 24 and 27) by die-cutting (as recited in claims 6, 9, 25 and 28), as such method of forming and cutting films is not only old and well known, but standard in the art. One would have being motivated to be able to form such film in a continuous strip easy to store and transports, and from which strip desired shapes and sizes could be cut.

### ***Relevant Prior Art***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


**Wragg** (U.S. Pat. 4,373,282), **O'Neill et al.** (U.S. Pat. 5,917,664), **Cobb, Jr. et al.** (U.S. Pat. 5,919,551), **Ishikawa** (U.S. Pat. 6,027,221) and **Gardiner et al.** (U.S. Pat. 6,091,547) disclose illumination devices having a transparent substrate including a plurality of optical elements disposed with variable density on a surface of such substrate. The optical elements are disclosed as being formed in a film applied to the substrate.

**Conclusion**

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ismael Negrón whose telephone number is (571) 272-2376. The examiner can normally be reached on Monday-Friday from 9:00 A.M. to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea, can be reached on (571) 272-2378. The facsimile machine number for the Art Group is (703) 872-9306.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, go to <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) toll-free at 866-217-9197.

  
JOHN ANTHONY WARD  
PRIMARY EXAMINER

  
Inr

February 16, 2005